

Fuel Tank – in-skid day tank

C024

> Specification sheet

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Description

In-skid fuel day tanks are designed to fit within the confines of the generator set skid rails and provides a minimum of 1-2 hours of operation at 60 Hz full load standby rating. Cummins Power Generation in-skid fuel day tanks are constructed of aluminized steel which provides the corrosion resistance of aluminum with the inherent strength of steel. Production tanks are leak tested to 5 psi, exceeding minimum testing requirements established by UL.

Certification



ISO9001 - This product was designed and manufactured in facilities certified to ISO9001.



UL listed - Listed to UL (File # MH 16055).

Features

Day tank construction

- Welded construction throughout
- 14 gauge aluminized steel (tanks larger than 12 gallons)

Day tank mounting

- Directly to generator set skid

Day tank control

- 240 AC connection
- Silkscreen of circuit schematic (and instructions for full 120/240 V conversion located on the inside top of the cover)

Fuel pump

- Automatic control
- Provides 16" Hg (20 ft diesel fuel) vacuum at inlet
- Motor: 115/230 V, ¼ HP connected to 115 V configuration
- Reconnectable to 120 or 240 V AC

Float switch

- 5 level switches: Low shutdown, low fuel level, pump on, pump off and high fuel level
- 1.25" NPT brass plug
- Magnetic reed type
- Switch contact rating: 30 Watts, 28 V DC

Liquid level gauge

- Material
 - Head: Die-cast zinc
 - Drive magnet: Alnico
 - Float: Cork-epoxy coated
 - Guide rods: Steel-zinc plated
 - Center shaft: Brass

Visual leak detection

- Tank to foundation ground clearance

UL listed

- File #MH 16055

50/60 Hz Compatible

Manual fill cap

Day Tank Kits

Product		Day Tank C024						
Model Name	Spec Letter	Feature	Kit #	Voltage	Fuel Capacity (nominal/usable gallons)	Instruction Sheet	For use with	Production Part #
DFAB	N	C024-2	0415-0745	120/240 V AC (see note 2)	19.3/16.8 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control	0539-1313-03
DFAC	N	C024-2	0415-0745	120/ 240 V AC (see note 2)	19.3/ 16.8 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control	0539-1313-03
DFCB	Z	C024-2	0415-0825	120/ 240 V AC (see note 2)	25.7/ 22.6 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control	0539-1767-04
DFCC	Z	C024-2	0415-0825	120/ 240 V AC (see note 2)	25.7/ 22.6 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control	0539-1767-04
DFCE	J	C024-2	0415-0825	120/ 240 V AC (see note 2)	25.7/ 22.6 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control	0539-1767-04
DFEC	L	C024-2	0415-0638	24 V DC (see note 1)	45.9/ 40.4 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control	0539-1094-03
DFED	H	C024-2	0415-0638	24 V DC (see note 1)	45.9/ 40.4 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control	0539-1094-03
DQAD	A-E	C024-2	0415-0745	120/ 240 V AC (see note 2)	19.3/ 16.8 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control (Not for use with Sub-base tank or Distribution Panel)	0539-1313-03
DQAE	A-E	C024-2	0415-0745	120/ 240 V AC (see note 2)	19.3/ 16.8 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control (Not for use with Sub-base tank or Distribution Panel)	0539-1313-03
DQAF	A-E	C024-2	0415-0745	120/ 240 V AC (see note 2)	19.3/ 16.8 gal	000G-0068	PCC3100 Control or PCC2100 Dynasty Control (Not for use with Sub-base tank or Distribution Panel)	0539-1313-03
DQHAA	A	C024-2	0415-0745	120/240 V AC (see note 2)	19.3/16.8 gal	000G-0068	PCC2100 Dynasty Control (not for use with Sub-base tank or Distribution Panel)	0179-4943-01
DQHAB	A	C024-2	0415-0745	120/240 V AC (see note 2)	19.3/16.8 gal	000G-0068	PCC2100 Dynasty Control (not for use with Sub-base tank or Distribution Panel)	0179-4943-01

- Control operates on 24 V DC supplied by generator set batteries.
- Control operates on 120 V AC or 240 V AC. A transformer supplied in the control provides 24 V DC to the control logic.

Day Tank Kit Features

Kit	Float Switch	Fuel Pump	Gauge - Liquid Level	Day Tank Control
0415-0745	0308-0913-06	0399-0117-01	0415-0565-65 (Length 12.5")	0625-2141-01
0415-0825	0308-0913-01	0399-0117-01	0415-0565-55 (Length 14.25")	0625-2141-02
0415-0638	0308-0913	0399-0117-01	0415-0565-52 (Length 16.38)	0625-2141-01

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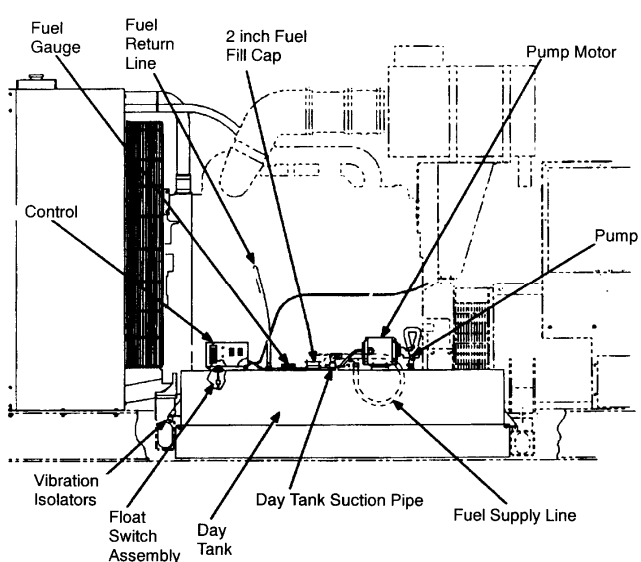


Figure 1 - Typical in-skid fuel day tank
(400-500 kW DF series)

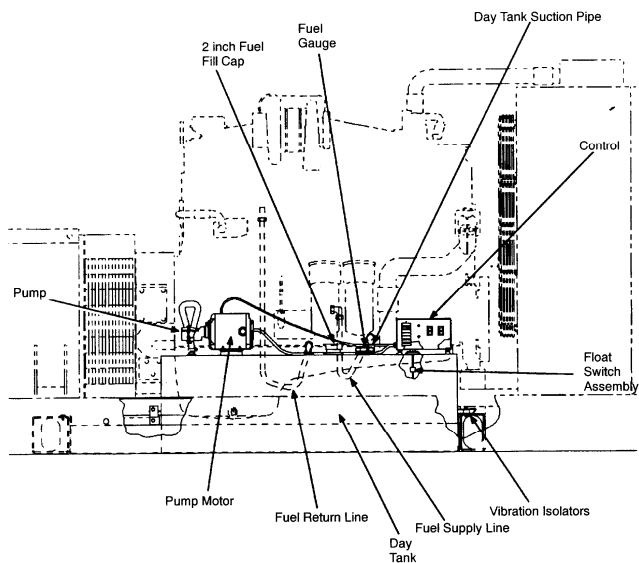


Figure 2 - Typical in-skid fuel day tank
(200-350 kW DF series)

Options

Mechanical Fuel Gauge

Product		Fuel Gauge- Liquid Level H095	
Model Name	Spec Letter	Part #	Kit #
DFAB	N	0539-0429	NA
DFAC	N	0539-0429	NA
DFCB	Z	0539-0429-02	NA
DFCC	Z	0539-0429-02	NA
DFCE	J	0539-0429-02	NA
DFEC	L	0539-0429	NA
DFED	H	0539-0429	NA
DQAD	A, E	NA	NA
DQAE	A, E	NA	NA
DQAF	A, E	NA	NA
DQHAA	A	NA	NA
DQHAB	A	NA	NA

Solenoid Valve

0307-2703: Used as a positive fuel shot-off on the float valve day tank when fuel is supplied from an overhead tank – 24 VDC (normally closed), 3/8 NPT female inlet and outlet, UL Listed.

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Rupture basin kits for in-skid day tanks

The rupture basin is a containment tank that collects fuel that may overflow from the day tank either due to a leak at the float switch or a fracture in the tank itself. The optional basin alarm switch, when wired into the day tank pump control, will provide indication of leakage. The basin is sized to a minimum 150% of the day tank capacity.

Note: Installation of an in-skid day tank and/or rupture basin will restrict stub-up area between the generator set cross-member supports.

Product		Rupture Basin Kit C142				Rupture Basin Switch Kit C158			
Model Name	Spec Letter	Part #	Kit #	Instruction Sheet	Rule	Part #	Kit #	Instruction Sheet	Also Required
DFAB	N	0539-1312	0415-0731	000G-0110	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	C142-2 or C168-2
DFAC	N	0539-1312	0415-0731	000G-0110	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	C142-2 or C168-2
DFCB	Z	0539-1693-01	0415-0837	000G-0110	Does not include C158	N/A	N/A	N/A	N/A
		0539-1693-02	N/A	N/A	Includes C158	Included in 0539-1693-02	N/A	N/A	N/A
DFCC	Z	0539-1693-01	0415-0837	000G-0110	Does not include C158	N/A	N/A	N/A	N/A
		0539-1693-02	N/A	N/A	Includes C158	Included in 0539-1693-02	N/A	N/A	N/A
DFCE	J	0539-1693-01	0415-0837	000G-0110	Does not include C158	N/A	N/A	N/A	N/A
		0539-1693-02	N/A	N/A	Includes C158	Included in 0539-1693-02	N/A	N/A	N/A
DFEC	L	0539-1095	0415-0681	N/A	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	C142-2 or C168-2
DFED	H	0539-1095	0415-0681	N/A	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	C142-2 or C168-2
DQAD	A, E	0539-1312	0415-0731	000G-0110	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	N/A
DQAE	A, E	0539-1312	0415-0731	000G-0110	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	N/A
DQAF	A, E	0539-1312	0415-0731	000G-0110	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	N/A
DQHAA	A	0179-4963	N/A	N/A	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	C142-2 or C168-2
DQHAB	A	0179-4963	N/A	N/A	Not for use with C150-2 or Sub-base tanks or Distribution panel	0539-1286	0415-0696	000G-0118	C142-2 or C168-2

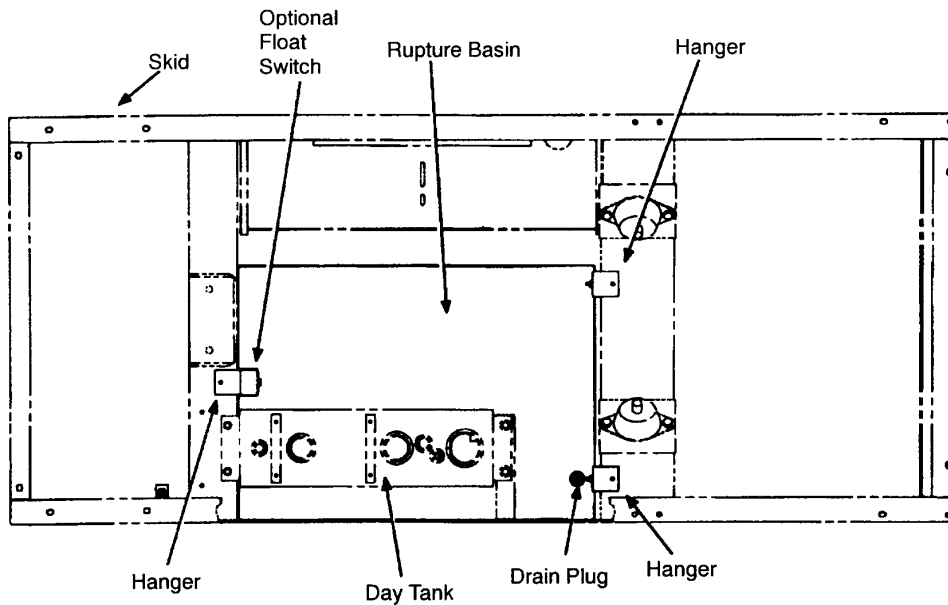


Figure 3 - Typical rupture basin installation

Americas
1400 73rd Avenue N.E.
Minneapolis, MN 55432 USA
Phone: 763 574 5000
Fax: 763 574 5298

Europe, CIS, Middle East and Africa
Manston Park Columbus Ave.
Manston Ramsgate
Kent CT 12 5BF United Kingdom
Phone 44 1843 255000
Fax 44 1843 255902

Asia Pacific
10 Toh Guan Road #07-01
TT International Tradepark
Singapore 608838
Phone 65 6417 2388
Fax 65 6417 2399

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect generator sets to any building electrical system except through an approved device or after building main switch is open.

Warning: For professional use only. Must be installed by a qualified service technician. Improper installation presents hazards of electrical shock and improper operation, resulting in severe personal injury and/or property damage.

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